

DECEMBER PUBLIC WORKSHOPS TO DISCUSS REVISIONS TO THE CARL MOYER PROGRAM GUIDELINES HANDOUT

Air Resources Board (ARB) staff (staff) invite you to participate in public workshops in December to discuss upcoming revisions to the Carl Moyer Program (CMP). The CMP provides financial incentive grants to reduce emissions from various mobile sources including on-road and off-road motor vehicles and agricultural engines, and locomotives.

These workshops will provide an opportunity for stakeholders to share broad input on issues that staff should consider in the guideline revisions.

As a result of feedback received from stakeholders, staff is proposing changes to the CMP 2008 Guidelines and the Voucher Incentive Program (VIP) Guidelines. This meeting will focus on the proposed changes including:

1. Proposed On-road Program Changes
2. Proposed Off-road Program Changes
3. Proposed Locomotive Program Changes
4. Proposed Administration Changes

This handout is provided to facilitate discussion at the December public workshops regarding staff's proposed revisions to the Carl Moyer Program. The handout contains descriptions of the proposed changes, with references to Attachments 1, 2 and 3. Attachments 1 and 2 contain proposed revised language to the VIP Guidelines and the CMP 2008 Guidelines, respectively. Attachment 3 is a proposed updated method for estimating fuel consumption for new locomotives.

FIVE PROPOSED ON-ROAD PROGRAM CHANGES

The VIP is a new program launched in 2009 to provide a quick and streamlined funding option for small fleet truck owners throughout the State. VIP funding is available throughout California, and complements the Fleet Modernization program that is available in several participating air districts. Staff has closely monitored the implementation of the new VIP program and received feedback from stakeholders.

Staff is proposing several changes to the VIP to help increase participation among truck owners and create a more streamlined truck replacement program. One of the proposed changes, expanded model year eligibility, would apply to both the VIP and Fleet Modernization programs. In total, there are five categories of changes that staff recommends:

- (1) Open VIP program to Medium Heavy-Duty Vehicles (MHDV): Currently, the VIP allows only heavy heavy-duty vehicles (i.e. with a declared Gross/Combined Gross Vehicle Weight Range greater than 60,000 pounds (lbs.)) to participate. This proposed change would also allow medium heavy-duty vehicles, with a gross vehicle weight rating of 19,501 lbs or greater; to participate at specified funding levels. Staff expects this change to increase participation because there is a large potential market of small fleets that operate medium heavy-duty vehicles.
- (2) Expand available VIP funding options: The VIP currently allows trucks to qualify for funding if they meet minimum usage requirements of 30,000 miles per year or 4,700 gallons of diesel fuel per year. Staff is recommending new funding levels that have a range of usage thresholds (i.e. 15,000 miles, 20,000 miles, 30,000 miles, etc.). This would allow trucks with lower usage to have the opportunity to participate, and trucks with higher usage would qualify for higher funding amounts.
- (3) Increase the maximum VIP funding available per truck to \$45,000: Staff is proposing to increase the maximum funding amounts from the current \$35,000 per truck to \$45,000 per truck. Actual funding amounts would depend on usage increments, weight class, and whether the replacement truck is new or used.
- (4) Expand eligibility of old engines from 1993 and older to 2002 and older: The current VIP and CMP Fleet Modernization Programs require the old truck to have a 1993 or older engine. Staff is recommending that the VIP and CMP Fleet Modernization Program increase eligibility up through model year 2002. This recommendation would help to align more closely with the Prop 1B Goods Movement program.
- (5) Minor changes to the VIP: Based on feedback from air districts, dealerships, dismantlers, and truck owners during the launch of the program, Staff recommends several minor changes to the VIP guidelines that are intended to help increase participation and achieve emissions reductions. These minor changes include:
 - a. Extending delivery dates of new trucks if supply issues arise
 - b. Addressing funding for 2 for 1 truck transactions
 - c. Modification to weight class requirement to align with the On-Road Fleet Modernization program/Prop 1B Goods Movement program
 - d. Eliminate requirement for districts to submit VIP Policies & Procedures (Districts must develop within two months)
 - e. Add table of required application fields
 - f. Specify dealership auditing requirements

- g. Align guideline requirements with appendix agreement requirements
- h. Revise small fleet definition to align with CMP on-road chapter
- i. Add weight requirements to application
- j. Remove IRS Form 1099 requirements from appendix
- k. Remove timing requirements for dealership inspections
- l. Modify language specifying engine emission requirements on Executive Orders

The revised language of the VIP Guidelines is provided in Attachment 1. The revised language to the CMP Guidelines, Chapter 4, On-Road Fleet Modernization, is provided in Attachment 2, pp. 1-2.

THREE PROPOSED OFF-ROAD PROGRAM CHANGES

- (1) Update Off-Road Diesel Retrofit Waiver: Under the 2008 CMP Guidelines, air districts may allow off-road diesel applicants to opt-out of the default retrofit requirement. Applicants must sign a waiver acknowledging that due to existing or future regulations they may be required to install a retrofit on the funded equipment at their own cost. This flexibility expired on March 27, 2009.

Based on discussions with stakeholders, staff is recommending continuing this flexibility for equipment not subject to a regulation. For equipment subject to an in-use regulation, the Board has determined that it is important to require retrofits for this equipment in order to protect the public's health.

For districts that previously offered the retrofit waiver to their applicants, staff is recommending to allow a three month grace period for the processing of off-road applications. Applications received prior to the Board approval date may still be funded utilizing the retrofit waiver. However, to utilize the retrofit waiver, these projects must be committed to (as defined in the Guidelines, Section 15 of the Program Administration Chapter) no later than three months after Board approval of the proposed language. Off-road project applications received after the Board approval date would require retrofits as described in the revised language, Chapter 5, Section IV(b)(9) & (10) and Chapter 7, Section IV(c)(9) & (10) of the Guidelines.

The revised language in the CMP Guideline is provided in Attachment 2, p. 3.

- (2) Expand Off-Road Equipment Replacement Program: The Off-Road Equipment Replacement Program was added to the 2008 CMP Guidelines (Guidelines). One of the basic requirements for the program was that the existing equipment must have an uncontrolled (Tier 0) engine.

Staff is recommending revising the Guidelines to include equipment with Tier 1 or Tier 2 engines to increase participation in the program.
The revised language in the CMP Guidelines is provided in Attachment 2, p. 4.

(3) Modify AG Project Life and Surplus Requirement: Under SBX2_3 (Florez), the Legislature required the CMP to be modified with regards to off-road farm equipment. The language directs that off-road farm equipment projects be allowed to have a minimum 10 years project life and projects can be funded up until a regulatory compliance deadline. Off-road equipment includes portable and mobile equipment, but does not include stationary equipment. To implement SBX2_3 staff is recommending revisions to the following Off-road chapters: Off-Road Compression-Ignition Equipment, Off-Road Large Spark-Ignition Equipment, Off-Road Equipment Replacement, as well as the Agricultural Sources. These chapters would be updated to allow for a maximum 10 year project life for mobile and portable farm equipment.

Project life affects the cost-effectiveness of a project, and many districts rank and select projects for funding based on the cost-effectiveness of a project. As a result, the project life for farm equipment would be capped at 10 years in order to reduce the ranking bias that would apply to farm equipment if a longer project life were to be allowed.

For off-road farm equipment which are subject to an in-use regulation, the applicable chapters would also be revised to allow projects to be eligible for funding up to the compliance date. These include forklifts used for agricultural crop preparation, as well as portable agricultural equipment.
The revised language in the CMP Guidelines is provided in Attachment 2, pp. 5-8.

THREE PROPOSED LOCOMOTIVE PROGRAM CHANGES

- (1) Update Locomotive Fuel Consumption Rate Factors (Table B-25): Staff is recommending the use of new factors consistent with the update released in April 2009 by the US Environmental Protection Agency (EPA) (EPA-420-F-09-025, *Emission Factors for Locomotives*.)

**Old Fuel Consumption
Rate Factor**

Table B-25 (2008 CMP
Guidelines)

Application	bhp-hr/gal
≥ 750 hp	20.8
< 750 hp	18.5

New Fuel Consumption Rate Factor

Table 3 (EPA-420-F-09-025)

Application	bhp-hr/gal
Line-Haul and Passenger (Class I/II)	20.8
Line-Haul and Passenger (Class III)	18.2
Switcher	15.2

The revised language in the CMP Guidelines is provided in Attachment 2, pp. 9-12.

- (2) Correct Example Locomotive Emission Calculation (Example 2, Appendix E) and Add Supplemental Document, “Method for Estimating Fuel Consumption of New Locomotive”: Staff has determined that the project activity is not consistent between the baseline and the reduced locomotive for alternative switcher technology. Locomotive activity (total engine work) is the product of total fuel consumption and the fuel consumption rate factor as required in the 2008 CMP Guidelines. The current Moyer examples use the same total fuel consumption for both the baseline and reduced engines, which when used in conjunction with different fuel consumption rate factors (as noted in Example 2, page E-30 of the current Guidelines), may erroneously imply that the new locomotive is both less fuel efficient and performs less work. Since the new locomotive will move approximately the same freight cars around the same distance, etc, it is not appropriate that the calculations show less work performed by the new engine(s). Therefore, staff is recommending that the calculation of emissions for the reduced locomotive be made by assuming that the total work performed is the same for both locomotives. Thus, it is not necessary to use either the total number of gallons of fuel or the fuel consumption rate factor for the new locomotive; simply use the product of the total fuel consumption and fuel consumption rate factor for the baseline locomotive.

If district staff would like to estimate the fuel consumption of a new alternative technology switcher locomotive for contract activity purposes, there are two reasonable and acceptable approaches. The simplest calculation is to assume a fuel consumption rate factor of 20 bhp-hr/gal for an alternative technology gen-set switcher. The other method is to start with the brake specific fuel consumption (typically BSFC on the engine

specification sheet), in lbs/bhp-hr, divided by the density of diesel fuel (approximately 7 lbs/gal) to estimate the fuel consumption rate for the new locomotive engine(s). Fuel consumption for the new locomotive is then estimated by taking the estimate of total work for the baseline locomotive, in bhp-hr/yr, divided by the estimated fuel consumption rate, in bhp-hr/gal, of the new locomotive engine(s). Detailed instructions for estimating the fuel consumption of the new locomotive can be found in the new supplemental document, "Method for Estimating Fuel Consumption of New Locomotive." Districts may propose an alternate method of estimating the fuel consumption of a new locomotive for case by case approval.

The revised language in the CMP Guidelines is provided in Attachment 2, pp. 13-15.

- (3) Accept Non-Fuel Based Project Activity: The 2008 CMP Guidelines currently require that locomotive project activity be based on fuel consumption (page VIII-5 (IV)(a)(4)). Staff is recommending including the ability for a districts to propose an alternate project activity source, such as actual usage data logged electronically by one or more locomotives, for case by case approval.

The revised language in the CMP Guidelines is provided in Attachment 2, p. 15.

TEN PROPOSED ADMINISTRATION CHANGES

- (1) Changes that reflect modifications discussed in Mail-Out #MSC 09-05: Several modifications and clarifications were explained and made in the Carl Moyer Program Advisory 08-009, also known as Mail-Out #MSC 09-05. In some cases, a revision was explained but no new language (strikeout/underline) was given. For these instances, new language has been included reflecting those changes. These changes can be found in Attachment 2 pertaining to sections 5, 8, and 17.
- (2) Update Cost-Effectiveness Limit and Capital Recovery Factor: The CMP Guidelines currently include a cost-effectiveness limit of \$16,000 per weighted ton of emissions reduced and capital recovery factors (CRFs) based on a discount rate of 4 percent. However, the Health and Safety Code Section 44283(a) authorizes the Board to update cost-effectiveness criteria to reflect consumer price index adjustments. Staff recommends updating the cost-effectiveness limit from the current \$16,000, to \$16,500 per project for each weighted ton of covered emissions reductions. This adjustment accounts for changes in inflation since the CMP Guidelines were approved. Also, staff recommends updating the CRFs to account for a revised discount rate of 3 percent. The methodology to determine the cost-effectiveness of CMP projects remains unchanged from the CMP Guidelines (see Appendix C Cost-Effectiveness Calculation

Methodology). Local air districts may continue to set lower cost-effectiveness limits to maximize program effectiveness. Use of the updated cost-effectiveness limit and CRFs would be allowed for contracts fully executed after the Board approval date.

The revised language in the CMP Guidelines is provided in Attachment 2, pp. 16-18.

- (3) Section 5 – Streamline District Applications: There are 4 elements to submit in a “completed application” – signed application, match commitment, district Board resolution, and the Policies and Procedures (P&P) manual.

Staff is recommending the following changes:

- Remove requirement that P&P manual be submitted each year to ARB. In lieu of submitting the P&P manual, districts would submit a statement by a district representative (e.g. program staff) that an updated P&P manual is maintained on-site at the district.
- Remove requirement to submit a match waiver for minimum allocation districts. H&SC Section 44287(f)

The revised language in the CMP Guidelines is provided in Attachment 2, pp. 19-21.

- (4) Section 8 – Streamline Fund Disbursements: As currently implemented, all districts must submit disbursement requests a minimum of two times for full fund disbursements. Staff is recommending the following changes to streamline this process:

- All districts may receive the entirety of administrative funds upfront in the initial disbursement.
- Districts requesting the minimum allocation may receive the entirety of their project funds upfront in a single disbursement (i.e. \$200,000 including admin). Documentation of project commitment or of previous fiscal year expenditures would not be required to receive the disbursement.
- Districts requesting more than the minimum allocation may receive at least \$200K, and up to 10% of their project funds in their initial disbursement. Documentation of project commitment or of previous fiscal year expenditures for this initial disbursement would not be required.
- For districts to receive subsequent fund disbursements, the following criteria would have to be met: a) the most recent required yearly report must demonstrate on-time expenditures consistent with H&SC Section 44287(k); b) program staff must submit documentation listing eligible projects and intent to fund equal to the disbursement amount; c) program staff must certify that an executed contract will not be entered into prior to any project being approved by the APCO or Board approved designee (for those

districts not requiring Board action) or district Board (for those districts requiring Board approval of projects) as consistent with their P&P manual.

The revised language in the CMP Guidelines is provided in Attachment 2, pp.21-23.

- (5) Section 10 – Update Match Fund Formula: Participation in the CMP requires a \$1 match for every \$2 in program funds received with the current match fund formula designed to cap funds required of districts at \$12M statewide. Due to the manner and timing in which fees that contribute to CMP funds are collected, the total program allocation may change after the original allocation. The current match formula does not work well with changes to the allocation amount. These factors can contribute to a delay in fund distribution.

To account for potential fluctuations in the program funding level and remove any associated delays, staff is recommending the following:

- Change the required match fund commitment to equal a percentage of each district's grant allocation. Each district would provide a specific percentage of match funds for every one dollar of State funds received.
- A match requirement of 15% of state funds awarded. Percentage amount would be based on previous typical match.

The revised language in the CMP Guidelines is provided in Attachment 2, p. 24.

- (6) Section 13 – Simplify Earned Interest Reporting and Tracking: Air quality management/air pollution control districts have expressed concerns regarding the difficulty in tracking interest using the procedures outlined in the 2008 CMP Guidelines and the lack of clarity and flexibility in those procedures. In response to those concerns, staff is recommending revisions that would simplify procedures for tracking and reporting interest earned on CMP funds. Such changes would also align procedures used for interest with existing procedures used for principal (i.e., CMP funds), and would establish a clear course of action for handling unspent interest funds.

Under the staff's proposal, in the 2010 Yearly Report, districts would report on all interest liquidated on projects and expended on program administration through June 30, 2010. Districts would also report any unspent interest as of June 30, 2010, and would have the option of either returning such unspent interest to ARB, or retaining it and expending it on the same timetable (i.e., with the same contract execution and expenditure targets) as Year 13 CMP funds.

Beginning with the 2011 Yearly Report, the proposed revisions would require districts to report annually regarding interest earnings and expenditures during the previous fiscal year. Districts would have the option of returning

unspent interest to ARB or adding it to the next year's CMP funds. Such interest funds would be treated the same as CMP funds, including having the same expenditure milestones.

The proposed revisions would retain the current Guideline provision that allows from five to ten percent of interest (depending on the number of inhabitants in a district) to be used on administrative expenses. A more restrictive and cumbersome calculation method for determining allowances for administrative expenses is proposed for deletion. That method is based on the amount of interest that accrues in a segregated administration fund account.

The revised language in the CMP Guidelines is provided in Attachment 2, pp.24-28.

- (7) Section 17 and 19 – Streamline District Reporting Requirements: Staff is proposing Sections 17 and 19 be revised to reflect the changes as discussed in Mail-Out #MSC 09-05 which is already in effect. As discussed in the Mail-Out, the Status Report, Annual Report, and Final Report will be combined into one Yearly Report to help simplify district reporting requirements. Section 17 outlined the requirements for districts submittal of the annual report. Section 19 outlined the requirements for districts submittal of the final report. Since these reports have been combined for simplicity into one document, the Yearly Report, those requirements outlined in Sections 17 and 19 are being combined into one section.

The revised language in the CMP Guidelines is provided in Attachment 2, pp. 28-32.

- (8) Section 20 – Assist with Cumulative Progress Tracking: To assist with cumulative progress tracking, staff is recommending a form be provided by ARB to each implementing air district twice a year requiring submittal of the following pieces of information:

- Fiscal Year (FY) Grant amount (ARB provides)
- FY Disbursement amount (ARB provides)
- FY amount contracted
- FY amount expended

Cumulative progress tracking may extend back to CMP Year 9 (i.e. FY 2006-2007). Year 9 was the first year that districts were required to report their project data in CARL. Districts are allowed to use cumulative tracking to show compliance with the expenditure requirements. As a result some Year 9 funds may not be contracted or expended.

Staff is proposing that the form be submitted during April and December to ARB by a district program representative (e.g. program staff). A lag time (one month) would be provided between the required submittal date and

the end date for data included, intended to provide district staff with the opportunity to gather this information. The intent of this form is to ensure the overall progress of fund disbursement. In combination with the Yearly Report, the proposed form reporting dates are designed to get coverage of the required information throughout the year while minimizing overlap and extraneous reports. As an alternative, district staff may contact ARB via e-mail or written response that the required information is updated in Clean Air Reporting Log (CARL) in which case ARB will generate the requested information.

The revised language in the CMP Guidelines is provided in Attachment 2, pp.32-33.

- (9) Section 27 – For Minimum Allocation and Rural Districts - Delete Requirement of an Application Tracking System: Feedback received from several rural districts stated it is overly cumbersome to require an application tracking system if the number of applications received is relatively small and easily manageable. Staff is recommending deleting the requirement of an application tracking system for minimum allocation and rural districts.

The revised language in the CMP Guidelines is provided in Attachment 2, p.33.

- (10) Section 30 – For Minimum Allocation and Rural Districts – Reduced Amount of Required Pre-Inspections: Staff is recommending revising the project pre-inspection requirement for minimum allocation and rural districts. These districts would be required to complete a reduced amount of pre-inspections (from 100% to 25%), based on the total number of projects for that fiscal year's funding cycle.

The revised language in the CMP Guidelines is provided in Attachment 2, p.33.